11Mbps Wireless LAN PC Card

User's Manual

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Contents

Chapter 1 Introduction 1

Local Area Network (LAN) 1
Ad Hoc Network 2
Infrastructure Network 2

Chapter 2 Installing the Wireless LAN Card 3

System Requirements 3
Installing the Hardware 3
Wireless LAN Card Status LEDs 4
Installing the Device Driver 5
Installing the Wireless LAN Card Software 7

Chapter 3 Configuring the Wireless LAN Card 11

Connecting to Other Computers with WLAN (Ad Hoc) 12
Connecting to Access Points (Infrastructure) 14
Setting Security 16

Setting Power Save Mode 18
Checking Link Quality (Infrastructure Mode Only) 20

Chapter 4 Uninstalling the Wireless LAN Card 21

Removing the Wireless LAN Card 21

Chapter 5 Updating the Device Driver 25

Chapter 6 Troubleshooting 27

Radio Interference 27
Card Not Detected 28
Cannot Connect to Another Wireless LAN Card 28
Poor Link Quality 29
Cannot Connect to Access Point 29

Appendix A Limited Warranty 31

Wireless LAN Hardware 31
Wireless LAN Software 32

Appendix B Regulatory Compliance 33

FCC Part 15 Declaration of Conformity (DoC) 33
FCC Rules and Regulations - Part 15 34
FCC Radiation Exposure Statement 34

Appendix C Setting Up TCP/IP 35

Glossary 37

Index 41

Chapter 1
Introduction

This User's Manual contains information on how to install and configure your Wireless LAN Card. Your Wireless LAN Card will allow you to connect your computer to other Wireless LAN Card equipped computers.

Local Area Network (LAN)

Simply put, a LAN is a network that exists in a relatively limited area. A network is two or more computers connected together sharing files and peripheral devices such as printers.

The Wireless LAN Card allows you to interact with other computers without having to run cables normally associated with networks. This lets you move your computer around while staying connected to your network.

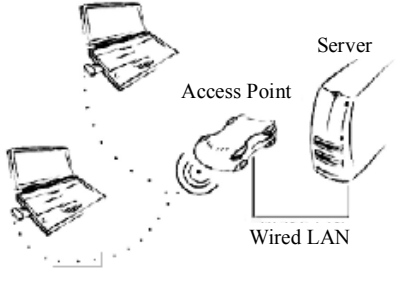
There are two ways to use the Wireless LAN Card. One way is to connect directly to one or

more Wireless LAN Card equipped computers, forming an Ad Hoc wireless network. The second way is to connect to an Access Point that gives you access to an existing wired LAN, forming an Infrastructure wireless network.

Ad Hoc Network

The Ad Hoc network offers peer to peer connections between workstations, allowing communication between computers within range that have an 802.11 DSSS compatible PC card installed. A wireless Ad Hoc network can also access a wired LAN's TCP/IP service (such as e-mail and the Internet) by using a TCP/IP software router on an Ethernet equipped PowerBook or notebook.

Infrastructure Network



The infrastructure network uses an access point (or several access points) as a gateway, linking the wireless network to a wired LAN. As a result, portable workstations on your wireless network have access to all of the features of your wired LAN including e-mail, Internet access, network printers and files server.

Chapter 2
Installing the Wireless LAN Card

System Requirements

To use the Wireless LAN Card, your computer must meet the following minimum requirements:

- Windows 98(SE)/Me /2000
- 16 MB of RAM, additional memory recommended
- Available (TypeII) PC card slot

Installing the Hardware

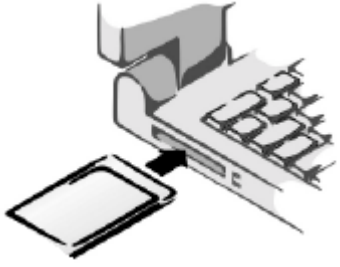
The Wireless LAN Card can be inserted into your computer's PCMCIA slot when the computer power is either turned on or off.

Caution: Do not force the Wireless LAN Card into the slot or severe damage to the computer may occur.

After installing the hardware, install the device driver and then install the Wireless LAN Card software.

The red LED on the Wireless LAN Card will light when the Wireless LAN Card is inserted into the PCMCIA slot and the computer is turned on.

Insert the end of the Wireless LAN Card into the PCMCIA slot of your computer with the printed label facing up, and slide it in until it is firmly seated.



Wireless LAN Card Status LEDs

The two LEDs on the Wireless LAN Card indicate connection status and data transfer operation status, as described below:

LED	Color	State	Description
Power	Red	On	Connected to an Ad Hoc or Infrastructure network.
		Blinking	Searching for an Access Point or another wireless LAN computer.
Activity	Green	Blinking	Transmission mode. The faster the LED blinks. The higher the data exchange rate.

Installing the Device Driver

Windows will automatically start the device driver installation when the Wireless LAN Card is installed or when Windows starts.

For Windows 98(SE)

Have your Windows 98(SE) /Me installation CD-ROM or disks available; Windows may prompt you for them.

1. When the wizard appears, click **Next**. Then select **Search for the best driver…** and click **Next**.
2. Insert the Installation CD into your CD-ROM drive. Check **Specify a location** and click **Browse** to specify the path to **D:\Driver\Win9x** where D is the drive letter and click **Next**.
3. When the driver is found, click **Next** to continue.
   NOTE: If prompted, insert your Windows 98(SE) installation CD and then click **OK**.
4. Click **Finish** to complete the driver installation.
5. When prompted to restart your computer, click **No** and continue to the next task.

If you need to set up the TCP/IP address or the Subnet Mask, refer to "Appendix C - Setting Up TCP/IP" on page 35.

For Windows Me

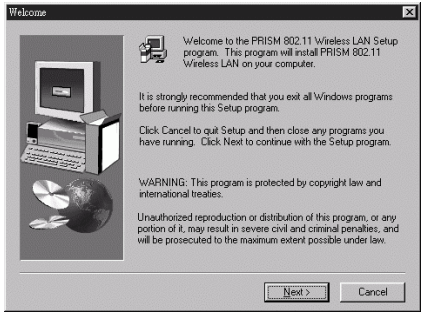
1. When the wizard appears, select **Specify the location …** and click **Next**.
2. Insert the Installation CD into your CD-ROM drive. Select the check boxes for both **Search for the best driver …** and **Specify a locatio**n. Click **Browse** to specify the path to **D:\Driver\WinME** where D is the drive letter and click **Next**.
3. When the driver is found, click **Next** to continue.
4. Click **Finish** to complete the driver installation.

For Windows 2000

1. When the wizard appears, click **Next**.
2. Select **Search for a suitable driver…** and click **Next**.
3. Check **Specify a location** and click **Next**.
4. Insert the Installation CD into your CD-ROM drive. Click **Browse** to specify the path to **D: \Driver\W2K** where D is the drive letter and click **OK**.
5. When the driver is found, click **Next** to continue.
6. When the **Digital Signature Not Found** message appears, click **Yes**.
7. Click **Finish** to complete the driver installation.

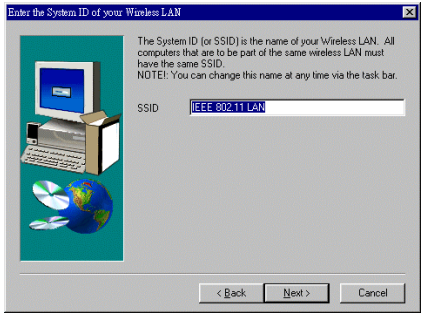
Installing the Wireless LAN Card Software

1. Close all Windows programs that are running.
2. Run **Setup.exe** from the **D**:**Utility** folder of the Wireless LAN Card Installation CD-ROM where D is the drive letter, and then click **Next**.

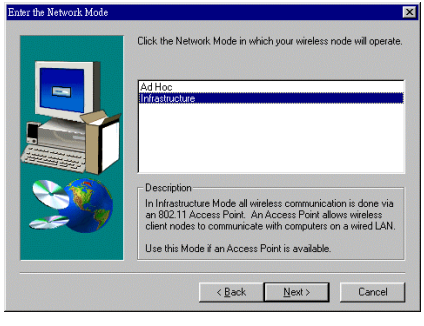

Welcome
Welcome to the PRISM 802.11 Wireless LAN Setup program. This program will install PRISM 802.11 Wireless LAN on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
Next >
Cancel

3. Click **Yes** to accept the Software Licensing Agreement.

4. In the **SSID** box, enter the Service Set ID name, and then click **Next**.


Enter the System ID of your Wireless LAN
The System ID (or SSID) is the name of your Wireless LAN. All computers that are to be part of the same wireless LAN must have the same SSID.
NOTE!: You can change this name at any time via the task bar.
SSID
IEEE 802.11 LAN
< Back
Next >
Cancel

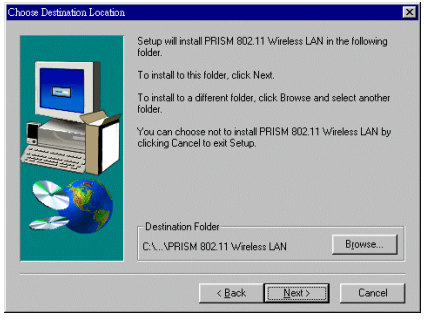
5. Write down the Service Set ID name exactly as you have entered it (for use in a later installation step), and then click **OK**.
6. Click the network mode **(AdHoc** or **Infrastructure**) in which your wireless client will operate, and then click **Next**.


Enter the Network Mode
Click the Network Mode in which your wireless node will operate.
Ad Hoc
Infrastructure
Description
In Infrastructure Mode all wireless communication is done via an 802.11 Access Point. An Access Point allows wireless client nodes to communicate with computers on a wired LAN.
Use this Mode if an Access Point is available.
< Back
Next >
Cancel

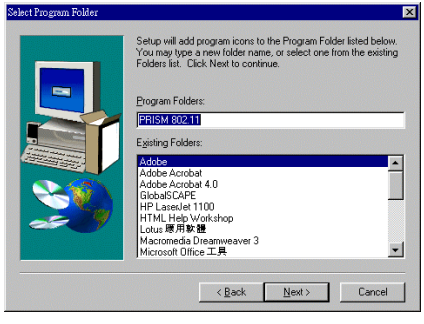
If you will be communicating in a wireless network only, choose **AdHoc**.

If you will be communicating through an Access Point that is connected to a wired LAN installation, choose **Infrastructure**.

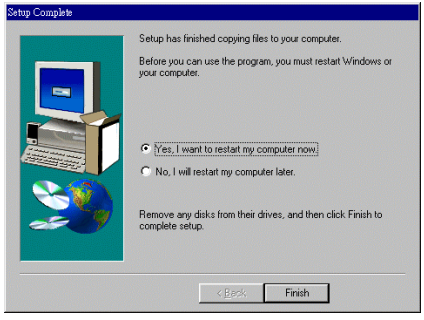
7. To install the software to the default destination folder, click **Next**. To install to a different folder, click **Browse**, select another folder, and then click **Next**.


Choose Destination Location
Setup will install PRISM 802.11 Wireless LAN in the following folder.
To install to this folder, click Next.
To install to a different folder, click Browse and select another folder.
You can choose not to install PRISM 802.11 Wireless LAN by clicking Cancel to exit Setup.
Destination Folder
C:\...\PRISM 802.11 Wireless LAN
Browse...
< Back
Next >
Cancel

8. Click **Next** to continue.


Select Program Folder
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
Program Folders:
PRISM 802.11
Existing Folders:
Adobe
Adobe Acrobat
Adobe Acrobat 4.0
GlobalSCAPE
HP LaserJet 1100
HTML Help Workshop
Lotus 應用軟體
Macromedia Dreamweaver 3
Microsoft Office 工具
< Back
Next >
Cancel

9. After Windows copies the Setup files from the Wireless LAN Card CD-ROM, click **Yes, I want to restart my computer now**, and then click **Finish**.


Setup Complete
Setup has finished copying files to your computer.
Before you can use the program, you must restart Windows or your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish

Chapter 3
Configuring the Wireless LAN Card

You can connect your computer to a network in one of two ways:

Ad Hoc	Connecting to other Wireless LAN Card equipped computers, forming a wireless network.
Infrastructure	Connecting to a wired network through an Access Point.

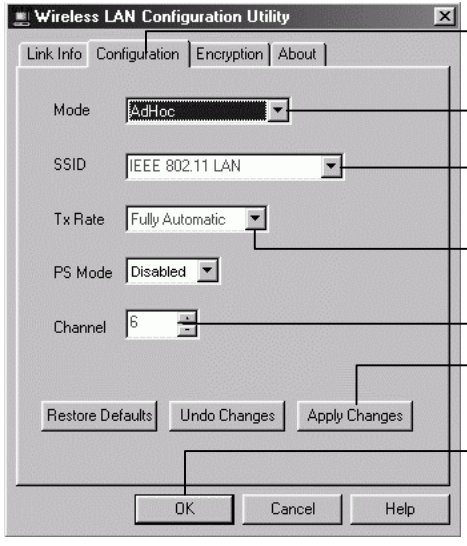
When the Wireless LAN Card is installed and your computer is turned on, one of the following **Wireless LAN Link Status** icons will be displayed in the taskbar at the bottom right corner of your Windows screen:

Not Linked	Computer is not connected to any other computers. (Red)
Linked	Computer joined to a network or formed a network. (Green)

Connecting to Other Computers with WLAN (Ad Hoc)

To connect your computer to an Ad Hoc network, complete the following steps:

1. In the taskbar, click the **Wireless LAN Link Status** icon to display the **Wireless LAN Configuration Utility** dialog box.
2. Click the **Configuration** tab.
3. In the **Mode** list, click **AdHoc**.
4. In the **SSID** list, click the Service Set ID (SSID) name of the Wireless LAN group. All wireless clients must use the same SSID in order to communicate with each other.
5. In the **Channel** list, click up or down to get the correct Channel Number which is the same as used by other computer to be connected to.
6. Click **Apply Changes**. You should now be able to find your computer on the Network Neighborhood in Windows Explorer.
7. Click **OK** to exit the utility.



1. Click the **Configuration** tab.
2. Click **AdHoc**.
3. Click **SSID** name of the Wireless LAN group.

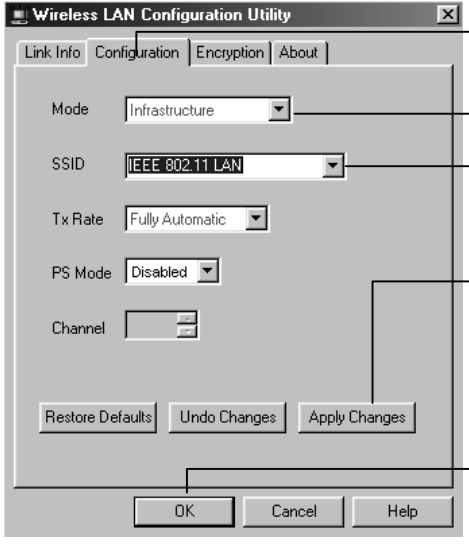
Default: **Fully Automatic**.

4. Click **Channel Number**.
5. Click **Apply Changes**.
6. Click **OK**.

Connecting to Access Points (Infrastructure)

To connect your computer to an Infrastructure network, complete the following steps:

1. In the taskbar, click the **Wireless LAN Link Status** icon to display the **Wireless LAN Configuration Utility** dialog box.
2. Click the **Configuration** tab.
3. In the **Mode** list, click **Infrastructure**.
4. In the **SSID** list, click SSID name of the Access Point. All wireless clients must use the same SSID in order to communicate with each other.
5. Click **Apply Changes**. You should now be able to find your computer on the Network Neighborhood in Windows Explorer.
6. Click **OK** to exit the utility.



1. Click the **Configuration** tab.
2. Click **Infrastructure.**
3. Click **SSID** name of the Access Point.
4. Click **Apply Changes**.
5. Click **OK** to exit the utility.

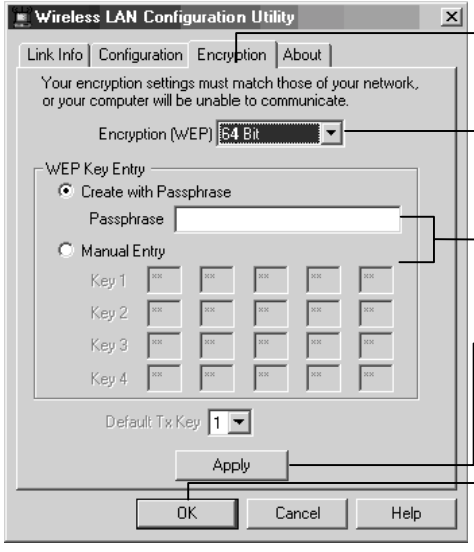
Setting Security

Your encryption settings must match those of your network, or your computer will be unable to communicate.

To establish a secure wireless network, complete the following steps:

The **Passphrase** of each computer must be the same before a connection can be made between the computers.

1. In the taskbar, click the **Wireless LAN Link Status** icon to display the **Wireless LAN Configuration Utility** dialog box.
2. Click the **Encryption** tab.
3. In the **WEP** (Wired Equivalent Privacy) list, click the proper WEP setting.
4. In the **Passphrase** box, enter the password or phrase, or click the **Manual Entry**.
5. Click **Apply**, and then click **OK**.



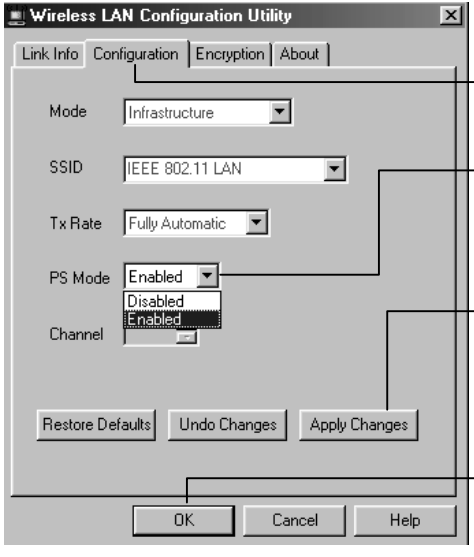
1. Click the **Encryption** tab.
2. Click the proper WEP setting.
3. Enter the password or phrase, or click the **Manual Entry**.
4. Click **Apply**.
5. Click **OK** to exit the utility.

Setting Power Save Mode

You may need to minimize all other Windows programs that are currently running.

Power Save Mode is recommended for devices where power consumption is a major concern, such as battery-powered devices. While in Power Save Mode the Access Point stores incoming messages in a memory buffer. The Wireless LAN Card wakes up periodically from Power Save Mode and checks for any messages that might be waiting at the Access Point. After the messages are transmitted to the Wireless LAN Card from the Access Point, the Wireless LAN Card goes back into Power Save Mode.

1. In the taskbar, click the **Wireless LAN Link Status** icon to display the **Wireless LAN Configuration Utility** dialog box.
2. Click the **Configuration** tab.
3. In the **PS Mode** (Power Save Mode) list, click **Enabled**, and then click **Apply Changes**.
4. Click **OK** to exit the utility.

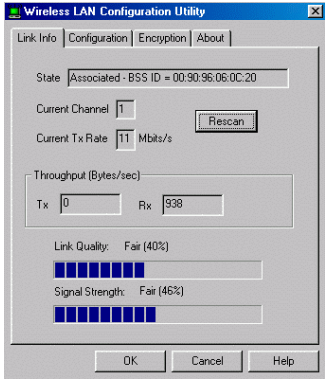


1. Click the **Configuration** tab.
2. In the **PS Mode** (Power Save) list, click **Enabled**.
3. Click **Apply Changes**.
4. Click **OK** to exit the utility.

Checking Link Quality (Infrastructure Mode Only)

To check the quality of your computer's wireless link to an Access Point, complete the following steps:

1. Click the **Link Info** tab.
   The State box shows the MAC address for the Access Point.
2. Link Quality and Signal Strength are displayed as percentages using active progress indicators that change as the network radio signal fluctuates. Link Quality categories are defined as follows:



Link Quality	Range (%)
Poor	0-29
Fair	30-59
Good	60-89
Excellent	90-100

3. Click **OK** to exit the utility.

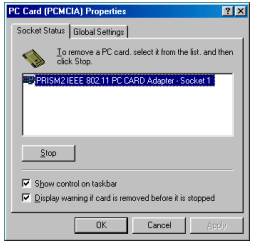
Chapter 4
Uninstalling the Wireless LAN Card

Removing the Wireless LAN Card

You should use the PC Card icon on the taskbar to stop PC Card before removing them. Removing card without warning the system can cause unexpected problems.

The Wireless LAN Card complies with the PCMCIA standard that allows devices to be inserted into and removed from the computer's PCMCIA socket when the computer is on. It is recommended that you follow the standard Windows procedure for disconnecting a PCMCIA device from your computer.

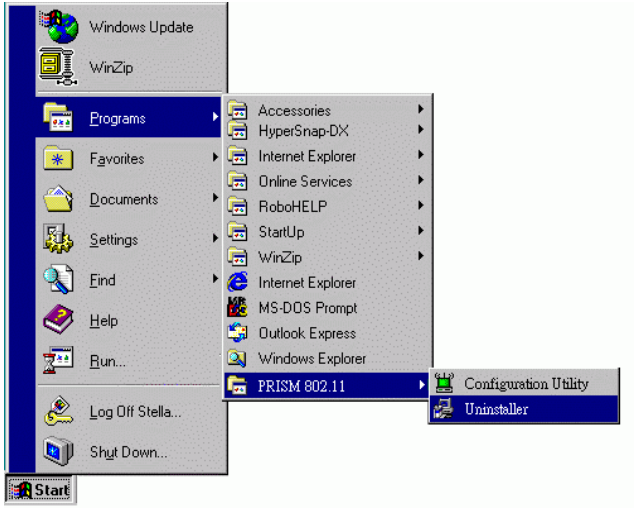
1. In the taskbar, click the PCMCIA icon, and then click **Adjust PC Card Properties**.
2. Select the Wireless LAN Card which you want to remove, click **Stop** and then click **OK**.
3. When the message appears that tells you it is safe to remove device, click **OK** and remove the Wireless LAN Card from the computer.


PC Card (PCMCIA) Properties
Socket Status
Global Settings
To remove a PC card, select it from the list, and then click Stop.
PRISM2 IEEE 802.11 PC CARD Adapter - Socket 1
Stop
Show control on taskbar
Display warning if card is removed before it is stopped
OK
Cancel
Apply

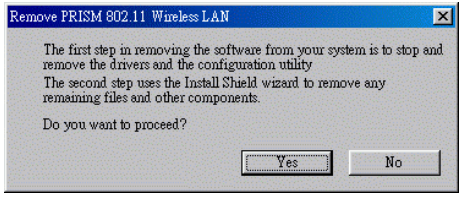
Uninstalling the Wireless LAN Card Software

If you need to uninstall the Wireless LAN Card and application software for any reason, complete the following steps:

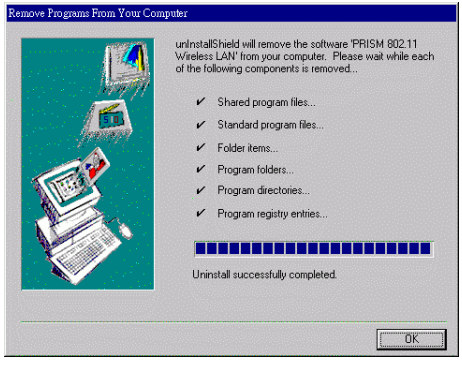
1. Close all programs that are currently running.
2. Remove the Wireless LAN Card from the computer.
3. Click the Windows **Start** button, point to **Programs**, **PRISM 802.11** and then click **Uninstaller**.



4. Click **Yes** to proceed with the software procedure.


Remove PRISM 802.11 Wireless LAN
The first step in removing the software from your system is to stop and remove the drivers and the configuration utility
The second step uses the Install Shield wizard to remove any remaining files and other components.
Do you want to proceed?
Yes
No

5. When the uninstallation is completed, click **OK**.


Remove Programs From Your Computer
unInstallShield will remove the software 'PRISM 802.11 Wireless LAN' from your computer. Please wait while each of the following components is removed...
Shared program files...
Standard program files...
Folder items...
Program folders...
Program directories...
Program registry entries...
Uninstall successfully completed.
OK

Chapter 5
Updating the Device Driver

To update the device driver, you have to remove the old driver first and then install a new one.

For the latest driver, please visit our web site for more information. When you have finished the download procedure, please follow as below to update the device driver.

1. Uninstall the Wireless LAN Card as described in Chapter 4. Follow the steps to remove the Wireless LAN Card and then uninstall the software.
2. Install the new driver you have downloaded. Refer to Chapter 2 for detailed instructions.

Once you finish installing the new driver, the updating is complete.

Chapter 6
Troubleshooting

Radio Interference

You may be able to eliminate any interference by trying the following:

- Reseat the Wireless LAN Card.
- Increase the distance between the wireless computers and the device causing the radio interference.
- Plug the computer equipped with the Wireless LAN Card into an outlet on a different branch circuit from that used by the affecting device.
- Consult the dealer or an experienced radio technician for help.
- Keep the computer with the Wireless LAN Card away from the microwave oven and large metal objects.

Card Not Detected

If the Wireless LAN Card is not detected by Windows, try the following:

- Make sure the Wireless LAN Card is properly inserted in the PCMCIA slot.
- Make sure the PCMCIA slot in your computer is working.
- Contact your dealer for additional testing if there is a hardware problem with the Wireless LAN Card.

Cannot Connect to Another Wireless LAN Card

If you cannot make a connection to another Wireless LAN Card from your computer, it could be due to one of the following reasons:

- Incorrect SSID. Make sure the SSID is the same for all computers that have a Wireless LAN Card.
- Changes are not being recognized by your computer. Restart your computer.
- If in Ad Hoc mode, make sure the **Log on to Windows NT domain** check box is not selected in the **Client for Microsoft Networks Properties** dialog box in the **Network Configuration** tab.
- Incorrect IP Address or Subnet Mask. Check these settings in the **TCP/IP Properties** dialog box in the **Network Configuration** tab.
- Make sure the channel for the Wireless LAN Card is set to the same channel number as the one for the other Wireless LAN card you are trying to connected to.

Poor Link Quality

If the Link Quality display stays in the Poor range, it could be due to one of the following reasons:

- Radio interference.
- Distance between Wireless LAN Card and Access Point is too far. Decrease the distance between the Wireless LAN Card and Access Point (or another card).

Cannot Connect to Access Point

If you cannot make a connection to the Access Point, it could be due to one of the following reasons:

- Make sure the Wireless LAN Card and Access Point have no physical connection problems.
- Make sure the SSID for the Wireless LAN Card is set to “null” or is the same as the Access Point.
- Make sure the privacy type is the same as that of Access Point. If both are using a Passphrase, make sure it is the same for both computers. Also, make sure the Default Key is the same for both computers.

Appendix A
Limited Warranty

Wireless LAN Hardware

The seller warrants to the end user ("Customer") that this hardware product will be free from defects in workmanship and materials, under normal use and service, for 1 year from the date of purchase from the seller or its authorized reseller. The seller's sole obligation under this express warranty shall be, at the seller's option and expense, to repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item, or if neither of the two foregoing options is reasonably available, The seller may, in its sole discretion, refund to the Customer the purchase price paid for the defective product. All products that are replaced will become the property of the seller. Replacement products may be new or reconditioned.

Wireless LAN Software

The seller warrants to Customer that each software program licensed from it , except as noted below, will perform in substantial conformance to its program specifications, for a period of 1 year from the date of purchase from the seller or its authorized reseller. The seller warrants the media containing software against failure during the warranty period. No updates are provided. The seller's sole obligation under this express warranty shall be, at the seller's option and expense, to refund the purchase price paid by Customer for any defective software product, or to replace any defective media with software which substantially conforms to applicable seller published specifications. Customer assumes responsibility for the selection of the appropriate application programs and associated reference materials. The seller makes no warranty or representation that its software products will meet Customer's requirements or work in combination with any hardware or software applications products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected. For any third party products listed in the seller software product documentation or specifications as being compatible, the seller will make reasonable efforts to provide compatibility, except where the non-compatibility is caused by a defect in the third party's product or from use of the software product not in accordance with the seller's published specifications or user manual.

Appendix B
Regulatory Compliance

FCC Part 15 Declaration of Conformity (DoC)

The following equipment:

Product Name: Wireless PC LAN Card

is herewith confirmed to comply with the requirements of FCC Part 15 rules. The operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC Rules and Regulations - Part 15

Warning: This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the Federal Communications Commissions Rules and Regulation. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Relocate your WLAN equipped laptop computer.
- Increase the separation between the WLAN equipped laptop computer and other electronics.
- Connect the WLAN equipped laptop computer into an outlet on a circuit different from that of other electronics.
- Consult the dealer or an experienced radio/TV technician for help.

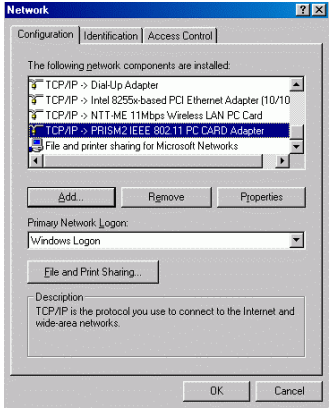
FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20cm between the radiator & your body.

Appendix C

Setting Up TCP/IP

1. On the taskbar, click the **Start** -> **Settings** -> **Control Panel**, double click the **Network** icon.
2. Click the **Configuration** tab of the **Network** dialog box.
3. In the **network components** list, click **TCP/IP** ->**PRISM2 IEEE 802.11 PC CARD Adapter**, and then click **Properties**.

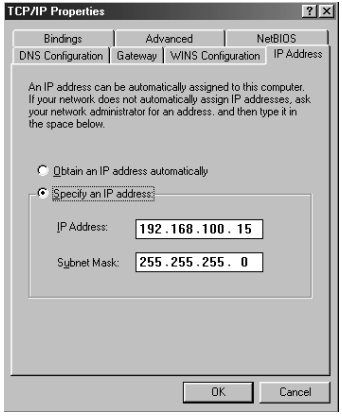


For correct IP address information for your wireless LAN installation, contact your network administrator.

For more information on IP addresses, see the Network Working Group Specification RFC 1918 on the Internet.

The subnet mask is a value that defines whether your computer communicates only within your LAN (for example, 255.255.255.0) or communicates outside of your LAN.

4. On the **IP Address** tab, click **Specify an IP address**. In the **IP Address** box, enter a valid four-component IP address, either a public or private one as required. If private IP address is used, the following three blocks of IP addresses are available for private networks:
   10. 0 . 0. 0 — 10.255.255.255
   172. 16. 0. 0 — 172. 31.255.255
   192.168. 0. 0 — 192.168.255.255



5. In the **Subnet Mask** box, enter a valid four-component IP address.
6. Click **OK**, and then click **Yes** to restart your computer.

Glossary

10BaseT An IEEE standard (802.3) for operating 10 Mbps Ethernet networks (LANs) with twisted pair cabling and a wiring hub.

Access Point An internetworking device that seamlessly connects wired and wireless networks. Access Points combined with a distributed system support the creation of multiple radio cells that enable roaming throughout a facility.

Ad Hoc A network composed solely of stations within mutual communication range of each other (no Access Point connected).

BSS *Basic Service Se*t. A set of stations controlled by a single coordination function.

Channel A medium used to pass protocol data units that can be used simultaneously in the same volume of space by other channels of the same physical layer, with an acceptably low frame error ratio due to mutual interference.

Encapsulated An Ethernet address mode that treats the entire Ethernet packet as a whole and places it inside an 802.11 frame along with a new header.

ESS *Extended Service Se*t. A set of one or more interconnected Basic Service Sets (BSSs) and integrated Local Area Networks (LANs) can be configured as an Extended Service Set.

Ethernet The most widely used medium access method, which is defined by the IEEE 802.3 standard. Ethernet is normally a shared media LAN; i.e., all the devices on the network segment share total bandwidth. Ethernet networks operate at 10Mbps using CSMA/CD to run over 10BaseT cables.

Gateway A network component that acts as an entrance to another network.

IEEE 802.11 The IEEE 802.xx is a set of specifications for LANs from the Institute of Electrical and Electronic Engineers (IEEE). Most wired networks conform to 802.3, the specification for CSMA/CD-based Ethernet networks or 802.5, the specification for token ring networks. 802.11 defines the standard for wireless LANs encompassing three incompatible (non-interoperable) technologies: Frequency Hopping Spread Spectrum (FHSS), Direct Sequence Spread Spectrum (DSSS), and Infrared. IEEE standards ensure interoperability between systems of the same type.

Infrastructure A wireless network centered about an Access Point. In this environment, the Access Point not only provides communication with the wired network but also mediates wireless network traffic in the immediate neighborhood.

IP *Internet Protocol*. The standard protocol within TCP/IP that defines the basic unit of information passed across an Internet connection by breaking down data messages into packets, routing and transporting the packets over network connections, then reassembling the packets at their destination. IP corresponds to the network layer in the ISO/OSI model.

IP Address An IP address is a 32-bit number that identifies each sender or receiver of information sent across the Internet. An IP address has two parts: the identifier of a particular network on the Internet and an identifier of the particular device (which can be a server or a workstation) within that network.

ISP *Internet Service Provide*r. An organization that provides access to the Internet. Small ISPs provide service via modem and ISDN while the larger ones also offer private line hookups (T1, fractional T1, etc.).

LAN *Local Area Networ*k. A communications network that serves users within a defined geographical area. The benefits include the sharing of Internet access, files, and equipment, such as printers and storage devices. Special network cabling (10BaseT) is often used to connect the PCs together.

NAT *Network Address Translatio*n. The translation of an Internet Protocol address (IP address) used within one network to a different IP address known within another network. One network is designated the internal network and the other is the external. The internal network then appears as one entity to the outside world.

PCMCIA *Personal Computer Memory Card International Associatio*n. This Association develops standards for PC cards, formerly known as PCMCIA cards. These cards are available in three types, and are about the same length and width as credit cards. However, the different cards range in thickness from 3.3 mm (Type I) to 5.0 mm (Type II) to 10.5 mm (Type III). These cards can be used for various functions, including memory storage, landline modems, and wireless modems.

PS Mode *Power Save* Mode. This mode is recommended for devices where power consumption is a major concern, such as battery-powered devices.

Radio Frequency *R*F, Terms: GHz, MHz, Hz —The international unit for measuring frequency is Hertz (Hz), equivalent to the older unit of cycles per second. One megahertz (MHz) is one Million-Hertz. One giga hertz (GHz) is one Billion-Hertz. The standard U.S. electrical power frequency is 60 Hz, the AM broadcast radio frequency band is 0.55–1.6 MHz, the FM broadcast radio frequency band is 88–108 MHz, and wireless 802.11 LANs operate at 2.4GHz.

SSID *Service Set I*D. A group name shared by every member of a wireless network. Only client PCs with the same SSID are allowed to establish a connection.

Subnet Mask A value that defines whether your computer communicates only within your LAN or communicates outside of your LAN, where it is routed out to the rest of the Internet. A Subnet Mask that has the same first three components (for example, 255.255.255.0) is the routing pattern for a Class C address.

TCP *Transmission Control Protoco*l. The standard transport level protocol that provides the full duplex, stream service on which many applications' protocols depend. TCP allows a process on one machine to send a stream of data to a process on another. Software implementing TCP usually resides in the operating system and uses the IP to transmit information across the network.

WEP *Wired Equivalent Privac*y. The optional cryptographic confidentiality algorithm specified by 802.11. The algorithm is being used to provide data confidentiality that is subjectively equivalent to the confidentiality of a wired LAN medium that does not employ cryptographic techniques to enhance privacy..

Index

1

10BaseT, 37

A

Access Point, 1, 2, 4, 11, 14, 18, 20, 29, 37, 38
Ad Hoc, 1, 2, 4, 11, 12, 28, 37
AdHoc, 8, 12

B

battery-powered devices, 18
BSS, 37

C

Cannot connect to Access Point
  troubleshooting, 29
Cannot connect to another Wireless LAN Card
  troubleshooting, 28
Card not detected
  Troubleshooting, 28
Channel, 12, 28, 37
Checking
  link quality, 20
Computer power, 3
Connecting to other Wireless LAN Card, 11

D

Default destination folder, 9
Device driver
  updating, 25
Driver
  installing, 5

E

ESS, 37
Ethernet, 2, 37, 38

G

Gateway, 2, 38
Glossary, 37

H

Hardware, 31, 32
  installing, 3
  problem, 28

I

Icons
  status, 11
IEEE, 35, 37, 38
Infrastructure, 1, 2, 4, 8, 11, 14, 20, 38
Installing
  hardware, 3
  Wireless LAN Card, 3
IP Address, 28, 36, 38
ISP, 39

L

LAN, i, 2, 3, 4, 7, 10, 11, 12, 14, 16, 18, 21, 22, 25, 27, 28, 29, 31, 32, 33, 34, 37, 38, 39, 40
LED, 4
Link Quality
  checking, 20

N

NAT, 39
Network, 1, 2, 4, 8, 11, 12, 14, 16, 20, 35, 36, 37, 38, 39, 40

P

PCMCIA, 3, 4, 21, 28, 39
  card slot, 3
Poor Link Quality
  Troubleshooting, 29
Power Save Mode, 18, 39
  setting, 18
Progress indicators, 20
PS, 39

R

Radio Frequency, 34, 40
Radio Interference, 27
RAM, 3
Removing
  Wireless LAN Card, 21
Restart
  computer, 28

S

Security
  setting, 16
Service Set ID, 8, 12, 40
Setting

Power Save Mode, 18
security, 16
Setting Up
TCP/IP, 35
Setup.exe, 7
Software
installing, 7
uninstalling, 22
Software Licensing Agreement, 7
SSID, 8, 12, 14, 28, 29, 40
Status icons, 11
Subnet Mask, 28, 36, 40

T

Taskbar, 11, 12, 14, 16, 18, 21, 35
TCP/IP, 2, 28, 35, 38
Troubleshooting
cannot connect to Access Point, 29
cannot connect to another Wireless LAN Card, 28
card not detected, 28
poor link quality, 29
radio interference, 27

U

Uninstalling
Wireless LAN Card, 21
Updating
device driver, 25
Utility
installing, 7

W

WEP, 40
Wired Equivalent Privacy, 16, 40
Wireless LAN Card
inserting into PCMCIA slot, 3